



DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2021-0335; Project Identifier MCAI-2020-01665-R]

RIN 2120-AA64

Airworthiness Directives; Airbus Helicopters Deutschland GmbH Helicopters

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Notice of proposed rulemaking (NPRM).

SUMMARY: The FAA proposes to adopt a new airworthiness directive (AD) for all Airbus Helicopters Deutschland GmbH MBB-BK 117 A-1, MBB-BK 117 A-3, MBB-BK 117 A-4, MBB-BK 117 B-1, MBB-BK 117 B-2, and MBB-BK 117 C-1 helicopters. This proposed AD was prompted by a report of sudden severe vibrations and a cracked open blade trailing edge caused by a loosened lead inner weight. This proposed AD would require inspections to determine if any bolted main rotor blades are installed, and replacement of the affected main rotor blades. The FAA is proposing this AD to address the unsafe condition on these products.

DATES: The FAA must receive comments on this proposed AD by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: You may send comments, using the procedures found in 14 CFR 11.43 and 11.45, by any of the following methods:

- Federal eRulemaking Portal: Go to <https://www.regulations.gov>. Follow the instructions for submitting comments.
- Fax: (202) 493-2251.

- Mail: U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE, Washington, DC 20590.

- Hand Delivery: Deliver to Mail address between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

For service information identified in this NPRM, contact Airbus Helicopters, 2701 N Forum Drive, Grand Prairie, TX 75052; phone: 972-641-0000 or 800-232-0323; fax: 972-641-3775; or at <https://www.airbus.com/helicopters/services/technical-support.html>. You may view this service information at the FAA, Office of the Regional Counsel, Southwest Region, 10101 Hillwood Pkwy., Room 6N-321, Fort Worth, TX 76177. For information on the availability of this material at the FAA, call (817) 222-5110.

Examining the AD Docket

You may examine the AD docket at <https://www.regulations.gov> by searching for and locating Docket No. FAA-2021-0335; or in person at Docket Operations between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this NPRM, the Luftfahrt-Bundesamt AD, any comments received, and other information. The street address for Docket Operations is listed above.

FOR FURTHER INFORMATION CONTACT: Kathleen Arrigotti, Aerospace Engineer, Large Aircraft Section, International Validation Branch, FAA, 2200 South 216th St., Des Moines, WA 98198; phone and fax: 206-231-3218; email: kathleen.arrigotti@faa.gov.

SUPPLEMENTARY INFORMATION:

Comments Invited

The FAA invites you to send any written relevant data, views, or arguments about this proposal. Send your comments to an address listed under ADDRESSES. Include

“Docket No. FAA-2021-0335; Project Identifier MCAI-2020-01665-R” at the beginning of your comments. The most helpful comments reference a specific portion of the proposal, explain the reason for any recommended change, and include supporting data. The FAA will consider all comments received by the closing date and may amend this proposal because of those comments.

Except for Confidential Business Information (CBI) as described in the following paragraph, and other information as described in 14 CFR 11.35, the FAA will post all comments received, without change, to <https://www.regulations.gov>, including any personal information you provide. The agency will also post a report summarizing each substantive verbal contact received about this NPRM.

Confidential Business Information

CBI is commercial or financial information that is both customarily and actually treated as private by its owner. Under the Freedom of Information Act (FOIA) (5 U.S.C. 552), CBI is exempt from public disclosure. If your comments responsive to this NPRM contain commercial or financial information that is customarily treated as private, that you actually treat as private, and that is relevant or responsive to this NPRM, it is important that you clearly designate the submitted comments as CBI. Please mark each page of your submission containing CBI as “PROPIN.” The FAA will treat such marked submissions as confidential under the FOIA, and they will not be placed in the public docket of this NPRM. Submissions containing CBI should be sent to Kathleen Arrigotti, Aerospace Engineer, Large Aircraft Section, International Validation Branch, FAA, 2200 South 216th St., Des Moines, WA 98198; phone and fax: 206-231-3218; email: kathleen.arrigotti@faa.gov. Any commentary that the FAA receives which is not specifically designated as CBI will be placed in the public docket for this rulemaking.

Background

Luftfahrt-Bundesamt, which is the aviation authority for Germany, has issued German AD D-2005-115, effective March 15, 2005, to correct an unsafe condition for Eurocopter Deutschland (now Airbus Helicopters Deutschland GmbH) Model MBB-BK 117 A-1, MBB-BK 117 A-3, MBB-BK 117 A-4, MBB-BK 117 B-1, MBB-BK 117 B-2, and MBB-BK 117 C-1 helicopters. Luftfahrt-Bundesamt advises that during the flight of a BK117 severe vibrations suddenly occurred, stemming from a cracked open blade trailing edge, which was traced to a loosened lead inner weight bolt. Additional inspection revealed extreme cavities of the lead weight resulting from the bolting process, which was performed as a repair for main rotor blades with bulging in the area of the lead inner weights. This condition, if not addressed, could result in loss of control of the helicopter.

Accordingly, the Luftfahrt-Bundesamt AD requires an inspection and log card review to determine if any bolted main rotor blades are installed, and replacement of the affected main rotor blades.

FAA's Determination

These helicopters have been approved by the aviation authority of Germany and are approved for operation in the United States. Pursuant to the FAA's bilateral agreement with Germany (now a member of the European Union), Luftfahrt-Bundesamt, its technical representative, has notified the FAA of the unsafe condition described in its AD. The FAA is proposing this AD after evaluating all known relevant information and determining that the unsafe condition described previously is likely to exist or develop on other helicopters of the same type design.

Related Service Information Under 1 CFR Part 51

The FAA reviewed Eurocopter Alert Service Bulletin No. ASB-MBB-BK117-10-125 dated February 14, 2005. This service information specifies

procedures for an inspection (for cracking of the paint) and log card review (for a certain entry or equivalent) to determine if any bolted main rotor blades (i.e., main rotor blades with bolted lead inner weights) are installed, and replacement of the affected main rotor blades.

This service information is reasonably available because the interested parties have access to it through their normal course of business or by the means identified in the ADDRESSES section.

Proposed AD Requirements in this NPRM

This proposed AD would require accomplishing the actions specified in the service information already described.

Costs of Compliance

The FAA estimates that this AD, if adopted as proposed, would affect 44 helicopters of U.S. Registry. Labor rates are estimated at \$85 per work-hour. Based on these numbers, the FAA estimates the following costs to comply with this proposed AD.

Estimated costs for required actions

Labor cost	Parts cost	Cost per product	Cost on U.S. operators
3 work-hours X \$85 per hour = \$255	\$0	\$255	\$11,220

The FAA estimates the following costs to do any necessary on-condition replacements that would be required based on the results of any required actions. The FAA has no way of determining the number of helicopters that might need these on-condition replacements:

Estimated costs of on-condition actions

Labor cost	Parts cost	Cost per product
Up to 20 work-hours X \$85 per hour = \$1,700 per blade (up to 4 blades)	Up to \$23,100 per blade (up to 4 blades)	Up to \$24,800 per blade (up to 4 blades)

Authority for This Rulemaking

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. Subtitle VII: Aviation Programs, describes in more detail the scope of the Agency's authority.

The FAA is issuing this rulemaking under the authority described in Subtitle VII, Part A, Subpart III, Section 44701: General requirements. Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

Regulatory Findings

The FAA determined that this proposed AD would not have federalism implications under Executive Order 13132. This proposed AD would not have a substantial direct effect on the States, on the relationship between the national Government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed, I certify this proposed regulation:

- (1) Is not a "significant regulatory action" under Executive Order 12866,
- (2) Would not affect intrastate aviation in Alaska, and
- (3) Would not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

The Proposed Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA proposes to amend 14 CFR part 39 as follows:

PART 39 - AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

2. The FAA amends § 39.13 by adding the following new airworthiness directive:

Airbus Helicopters Deutschland GmbH: Docket No. FAA-2021-0335; Project Identifier MCAI-2020-01665-R.

(a) Comments Due Date

The FAA must receive comments on this airworthiness directive (AD) by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

(b) Affected ADs

None.

(c) Applicability

This AD applies to all Airbus Helicopters Deutschland GmbH MBB-BK 117 A-1, MBB-BK 117 A-3, MBB-BK 117 A-4, MBB-BK 117 B-1, MBB-BK 117 B-2, and MBB-BK 117 C-1 helicopters, certificated in any category.

(d) Subject

Joint Aircraft Service Component (JASC) Code: 6210, Main Rotor Blades.

(e) Unsafe Condition

This AD was prompted by a report of sudden severe vibrations and a cracked open blade trailing edge caused by a loosened lead inner weight. The FAA is issuing this AD to address bolted lead inner weights of the main rotor blade, which could loosen and

cause cracking of the open blade trailing edge. The unsafe condition, if not addressed, could result in loss of control of the helicopter.

(f) Compliance

Comply with this AD within the compliance times specified, unless already done.

(g) Required Actions

Within 30 days after the effective date of this AD, review the log card (or equivalent record) and visually inspect each main rotor blade to determine if any bolted main rotor blades (i.e., main rotor blade with bolted lead inner weight) are installed in accordance with paragraphs 2.A.1., 2.B.1., 2.B.2., and 2.B.3. of the Accomplishment Instructions of Eurocopter Alert Service Bulletin ASB-MBB-BK117-10-125, dated February 14, 2005. If during the review, the total hours time-in-service (TIS) cannot be positively determined, this AD requires treating that part as having accumulated more than 3,000 total hours TIS. If any bolted main rotor blade (i.e., main rotor blade with bolted lead inner weight) is installed, replace the main rotor blade in accordance with paragraph 2.B.4. of the Accomplishment Instructions of Eurocopter Alert Service Bulletin ASB-MBB-BK117-10-125, dated February 14, 2005, as follows:

(1) For a bolted main rotor blade that has accumulated less than 2,300 total hours TIS on the blade since bolting of the lead inner weight as of the effective date of this AD: Before accumulating 2,500 total hours TIS on the blade since bolting of the lead inner weights.

(2) For a bolted main rotor blade that has accumulated 2,300 total hours TIS up to 3,000 total hours TIS inclusive, on the blade since bolting of the lead inner weight as of the effective date of this AD: Within 200 hours TIS after the effective date of this AD.

(3) For a bolted main rotor blade that has accumulated more than 3,000 total hours TIS on the blade since bolting of the lead inner weight as of the effective date of this AD: Within 50 hours TIS after the effective date of this AD.

(h) Contacting the Manufacturer to Determine TIS

Where Eurocopter Alert Service Bulletin ASB-MBB-BK117-10-125, dated February 14, 2005, specifies to send a form to the manufacturer to determine TIS since bolting, this AD does not include that requirement.

(i) Alternative Methods of Compliance (AMOCs)

(1) The Manager, International Validation Branch, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the manager of the certification office, send it to the attention of the person identified in paragraph (j)(1) of this AD. Information may be emailed to: 9-AVS-AIR-730-AMOC@faa.gov.

(2) Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office.

(j) Related Information

(1) For more information about this AD, contact Kathleen Arrigotti, Aerospace Engineer, Large Aircraft Section, International Validation Branch, FAA, 2200 South 216th St., Des Moines, WA 98198; phone and fax: 206-231-3218; email: kathleen.arrigotti@faa.gov.

(2) For service information identified in this AD, contact Airbus Helicopters, 2701 N Forum Drive, Grand Prairie, TX 75052; phone: 972-641-0000 or 800-232-0323; fax: 972-641-3775; or at <https://www.airbus.com/helicopters/services/technical-support.html>. You may view this referenced service information at the FAA, Office of the Regional Counsel, Southwest Region, 10101 Hillwood Pkwy., Room 6N-

321, Fort Worth, TX 76177. For information on the availability of this material at the FAA, call (817) 222-5110.

(3) The subject of this AD is addressed in Luftfahrt-Bundesamt German AD D-2005-115, effective March 15, 2005. You may view the Luftfahrt-Bundesamt German AD on the Internet at <https://www.regulations.gov> in the AD Docket.

Issued on April 16, 2021.

Lance T. Gant, Director,
Compliance & Airworthiness Division,
Aircraft Certification Service.

[FR Doc. 2021-08569 Filed: 4/23/2021 8:45 am; Publication Date: 4/26/2021]